## **AMENDMENTS TO THE CLAIMS:**

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

## **Listing of Claims:**

## 1-29. (Cancelled)

- 30. (Previously Presented) An abrasive comprising cerium oxide particles, said particles having a crystal grain boundary and having a maximum diameter of not larger than 3000 nm.
- 31. (Previously Presented) An abrasive comprising cerium oxide particles, wherein a crystallite of said cerium oxide particles having a crystal grain boundaries has a maximum diameter not larger than 600 nm.
- 32. (Previously Presented) The abrasive of Claim 30, wherein said crystallite of said cerium oxide particles has a maximum diameter of not larger than 600 nm.
- 33. (Previously Presented) The abrasive of Claim 30, wherein said cerium oxide particles have pores.

Appl. No. 10/042,271 Amendment dated May 28, 2004 Reply to Office Action of December 30, 2003

- 34. (Previously Presented) The abrasive of Claim 30, wherein said cerium oxide particles have a porosity of from 10 to 30% as determined from the ratio of a true density measured with a pycnometer to a theoretical density determined by X-ray Rietvelt analysis.
- 35. (Currently Amended) The abrasive of Claim 30, wherein said cerium oxide particles have a pore volume of from [[0.2]]0.02 to 0.05cm<sup>3</sup>/g as measured by B.J.H. method.
- 36. (Previously Presented) The abrasive of Claim 30, wherein said cerium oxide particles have a bulk density not higher than 6.5 g/cm<sup>3</sup>.
- 37. (Previously Presented) The abrasive of Claim 30 further comprising a medium, wherein said medium is water.
- 38. (Previously Presented) The abrasive of Claim 30 further comprising a dispersant.
- 39. (Previously Presented) The abrasive of Claim 38, wherein said dispersant is at least one selected from a water-soluble organic polymer, a water-soluble anionic surfactant, a water-soluble nonionic surfactant and water-soluble amine.

Appl. No. 10/042,271 Amendment dated May 28, 2004 Reply to Office Action of December 30, 2003

- 40. (Previously Presented) An abrasive as claimed in claim 39 wherein said dispersant is a polyacrylic acid type polymer.
- 41. (Previously Presented) The abrasive of Claim 30 wherein cerium oxide particles with a diameter not smaller than 1µm occupies at least 0.1% by weight of the total weight of the cerium oxide particles.
- 42. (Previously Presented) The abrasive of Claim 30, wherein said cerium oxide particles having said crystal grain boundary have a property of polishing a target member while collapsing.
- 43. (Previously Presented) The abrasive of Claim 30, wherein said cerium oxide particles having said crystal grain boundary have a property of polishing a target member while forming new surfaces not coming into contact with said medium.
- 44. (Previously Presented) The abrasive of Claim 30, wherein a content of the cerium oxide particles having a particle diameter not smaller than 0.5 µm after polishing, measured by centrifugal sedimentation after polishing a predetermined target substrate, is in a ratio of not more than 0.8 with respect to that content before polishing.

Appl. No. 10/042,271 Amendment dated May 28, 2004 Reply to Office Action of December 30, 2003

45. (Currently Amended) The abrasive of Claim 30, wherein cerium oxide particle diameter at D90% by volume measured by laser diffraction after a target substrate has been polished is in

a ratio of from 0.4 to [[09]]0.9 with respect to that particle diameter before polishing.

- 46. (Currently Amended) A method of polishing a predetermined substrate, comprising polishing said substrate using an abrasive as claimed in 30 comprising cerium oxide particles, said particles having a crystal grain boundary and having a maximum diameter of not larger than 3000 nm.
- 47. (Currently Amended) A method of polishing a substrate as claimed in claim 46, wherein strength of the substrate is larger than the breaking strength of grain boundary of an exidationthe cerium oxide particles.
- 48. (Previously Presented) The method of polishing the substrate as claimed in claim 46 wherein said predetermined substrate is a semiconductor chip with a silica film formed thereon.
- 49. (Currently Amended) A manufacturing method of a semiconductor device comprising the step of polishing a semiconductor chip having a silica film formed thereon with an abrasive as claimed in claim-30 comprising cerium oxide particles, said particles having a crystal grain boundary and having a maximum diameter of not larger than 3000 nm.